

28. Caldwell, J. R., Cobb, S., Dowling, M. D., and Jongh, D.: The dropout problem in hypertensive therapy. *J Chron Dis* 22: 579-592 (1970).
29. Wilber, I. A., and Barrow, I. G.: Reducing elevated blood pressure: experience found in a community. *MN Med* 52: 1303-1306 (1969).
30. Wilber, I. A., and Barrow, J. G.: Hypertension—a community problem. *Am J Med* 52: 653-663 (1972).
31. McKenney, J. M., et al.: The effect of clinical pharmacy services on patients with essential hypertension. *Circulation* 48: 1104-1111 (1973).
32. Sackett, D. L., et al.: Randomized clinical trial of strategies for improving medication compliance in primary hypertension. *Lancet* No. 7918: 1205-1207, May 31, 1975.
33. Doherty, W. J., Schrott, H. G., Metcalf, L., and Iasiello-Vailas, L.: Effect of spouse support and health beliefs on medication adherence. *J Fam Pract* 17: 837-841 (1983).
34. Grieco, A. J., et al.: New York University Medical Center's Cooperative Care Unit: patient education and family participation during hospitalization—the first ten years. *Patient Educ Counsel* 15: 3-15 (1990).
35. Satariano, W., and Syme, S.: Life change and disease in elderly populations: coping with change. *In* *Biology, behavior and aging*, I. McGough, S. Keisler, and I. March, editors. Academic Press, New York, 1981.
36. National Heart, Lung, and Blood Institute: The fifth report of the Joint National Committee on Detection, Evaluation and Treatment of High Blood Pressure (JNC V). National Institutes of Health, Washington, DC, 1992, pp. 1-53.

LETTER TO THE EDITOR

What Incentives are Effective Rewards for 'Hidden Populations' Interviewed as a Part of Research Projects?

The results of a quasi-experimental study of incentives used to increase attendance at AIDS prevention sessions were recently published in *Public Health Reports* (1). In days past when principal investigators (PI) wrote grants and said they would recruit "x" number of subjects, much of the methodology in accomplishing this was left to the discretion of the PI. More recently, our grant reviewers, and as Deren et al. suggest, even the National Institutes of Health (NIH) have taken a stronger role and have suggested protocol changes, including changes related to the type of remuneration we offer our study subjects.

Some reviewers believe that incentives should not be given. However, one must balance the risk of "coercing the subjects"—especially vulnerable subjects—with the risk of losing subjects. Collecting data from vulnerable subjects and "hidden" populations for research projects is delicate for several reasons. These reasons become clearer when there is an awareness of who is included in these hidden populations.

Hidden populations are populations whose behavior is illicit and their members may not be known to society. The members of such populations may be persons who engage in behaviors such as crack cocaine use, IV drug use, prostitution; they may be felons, gang members, and burglars. They are also vulnerable populations such as homosexuals, African Americans, Hispanics, Asian Americans, and homeless persons. They are not represented in most studies, and the inclusion of such populations into our studies increases the value of our findings. So, while NIH has made inclusion of females and minorities mandatory, grant reviewers restrict the investigator's ability to recruit these populations into their studies by commenting on the amount of money and the type of remuneration which they allow us to provide to respondents.

Recruiting these persons in studies requires access

through indigenous means. This might include canvassing bars, taverns, drug-copping areas, shooting galleries, public parks, prostitution strolls, laundromats, beauty shops, or bus stops. But one thing is certain: incentives make a difference in recruiting members of hidden populations.

During one of our grant reviews several years ago, the reviewers asked that food coupons be substituted for cash. After considerable experience with offering gift certificates from grocery stores, we have concluded that cash payments are preferable for a variety of reasons. Many participants view gift certificates as comparable to food stamps and feel stigmatized in receiving them. Certificates are often inconvenient to use because there is not a store located near the subject. Change over \$5 has been permitted only in the form of additional gift certificates; this is time consuming to the user. An added frustration is that, in their ignorance that these certificates are used like cash, some checkers have been known to ask for identification before honoring them, which is an embarrassment for some of our subjects who often don't have any form of identification with them.

Overall, our subjects have indicated that they feel cash to be a more valued, dignified, and convenient form of payment for their time. Because of the considerable length of our interviews (2.5 hours on average), we feel that the extra incentive provided by cash is warranted in both treatment and community samples. We commend the authors for analyzing these data and the Editor of *Public Health Reports* for making the findings of this study known. Perhaps these findings will help applicants in their future grant reviews.

Linda B. Cottler, PhD; Wilson M. Compton, MD; Susan Keating, BSN; Washington University School of Medicine

References

1. Deren, S, et al.: The impact of providing incentives for attendance at AIDS prevention sessions. *Public Health Rep* 109: 548-553, July-August 1994.